

Notice of Allowability

Application No.

10/758,937

Examiner


Stephen E. Jones

Applicant(s)

HAUGER ET AL.

Art Unit

2817

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment dated 9/30/05 and the interview of 11/18/05.
2. ☒ The allowed claim(s) is/are 1,4,5,8-11 and 15-27.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>11/18/05</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Lawrence Cullen on 11/18/05.

The application has been amended as follows:

Claim 1. (Currently amended) A system for reducing tilt effects in a radio frequency (RF) attenuator comprising:

an RF attenuator including at least one series diode, and at least one shunt branch having at least one shunt diode, said shunt branch being electrically coupled to said series diode;

a parallel resonant circuit electrically coupled to each of said at least one shunt branch, wherein said parallel resonant circuit is configured to compensate for a parasitic reactance in said RF attenuator;

a shunt bias input electrically coupled to said at least one shunt branch, wherein said shunt bias input is configured to route a first direct current (DC) bias current to said at least one shunt diode; and

a series bias input electrically coupled to said at least one series diode, wherein said series bias input is configured to route a second DC bias to said at least one series diode;

wherein said first and said second DC bias are configured to establish an impedance of said at least one shunt diode [[,]] and said at least one series diode, [[and]] said at least one series diode and said at least one shunt diode comprise positive-intrinsic-negative (PIN) diodes, and said parallel resonant circuit is coupled in series with said at least one shunt branch from a received RF signal perspective.

Claim 8. (Currently amended) A system for reducing tilt effects in a radio frequency (RF) attenuator comprising:

an RF attenuator including at least one series diode, and at least one shunt branch having at least one shunt diode, said shunt branch being electrically coupled to said series diode;

a parallel resonant circuit electrically coupled to each of said at least one shunt branch, wherein said parallel resonant circuit is configured to compensate for a parasitic reactance in said RF attenuator;

a shunt bias input electrically coupled to said at least one shunt branch, wherein said shunt bias input is configured to route a first direct current (DC) bias current to said at least one shunt diode; and

a series bias input electrically coupled to said at least one series diode, wherein said series bias input is configured to route a second DC bias to said at least one series diode;

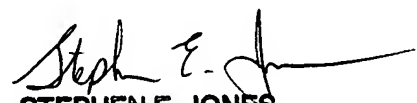
wherein said first and said second DC bias are configured to establish an impedance of said at least one shunt diode [[,]] and said at least one series diode, [[and]] said at least one series diode and said at least one shunt diode comprise positive-intrinsic-negative (PIN) diodes, said parallel resonant circuit comprises an inductor, and a capacitor electrically coupled in parallel, and said parallel resonant circuit further comprises a resistor electrically coupled in parallel with said inductor and said capacitor, wherein said resistor is configured to limit a maximum impedance of said parallel resonant circuit.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen E. Jones whose telephone number is 571-272-1762. The examiner can normally be reached on Monday through Friday from 9 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Pascal can be reached on 571-272-1769. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SEJ


STEPHEN E. JONES
PRIMARY EXAMINER